

**IN THE CLAIMS:**

Please amend the claims as follows:

a2 4. (Amended) Expression cassette as claimed in claim 1,  
wherein the receptor has affinity for a ligand.

a3 7. (Amended) Expression cassette as claimed in claim 1,  
further comprising a reversibly integrated resistance gene.

a4 10. (Amended) Expression cassette as claimed in claim 1  
further comprising a second therapeutic gene.

a5 12. (Amended) Expression cassette as claimed in claim 1,  
with coding sequences which code essentially for human or  
humanized gene products.

13. (Amended) Expression cassette as claimed in claim 1,  
wherein the ventricle-specific myosin-light chain-2 (MLC-2v)  
promoter is used as the organ-specific or tissue specific  
promotor.

a6 15. (Amended) Expression cassette as claimed in claim 13 or  
14, with coding sequences which code essentially for human or  
humanized gene products.

16. (Amended) Vector comprising an expression cassette as claimed in claim 1.

17. (Amended) Vector comprising an expression cassette as claimed in claim 13.

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21. (Amended) Process as claimed in claim 18, wherein the embryonal stem cells are obtained from

a) blastocysts or

b) enucleated oocytes into which the nucleus of a differentiated adult somatic cell has been transferred,

22. (Amended) Process as claimed in claim 18, wherein the receptor-specific ligands are coupled to paramagnetic microbeads and the ligand-marked cells are separated from the unmarked cells in a magnetic field.

23. (Amended) Process as claimed in claim 18 for producing autologous human somatic cells, the pluripotent precursor cells being obtained from an autologous human donor.

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27. (Amended) Transgenic cardiomyocytes which can be obtained using a process as claimed in claim 19.

28. (Amended) Transgenic cardiomyocytes which can be obtained using a process as claimed in claim 18.

29. (Amended) Use of transgenic cells as claimed in claim 24 for preferably autologous cell transplantation, or for gene therapy, as especially for cell-mediated gene transplantation.

30. (Amended) Use of an expression cassette as claimed in claim 1 or of a vector as claimed in claim 16 for genetic alteration of pluripotent precursor cells of a mammal.

31. (Amended) Use of an expression cassette as claimed in claim 1 or of a vector as claimed in claim 16 for producing in vitro differentiated somatic cells of a mammal.